

SB 375 Requirements on Model/Tool, Data/GIS, & Forecasting Development

Modeling Task Force

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AB 32 → SB 375

- In ARB's *Draft Scoping Plan*, the preliminary recommendation for “Local government actions and regional targets (Measure No. T-9)” is to reduce greenhouse gas emissions **statewide** by **2 MMTCO₂E** in 2020.
- Further, in the *Climate Change Draft Scoping Plan Appendices* (Page C-41 and C-43), based on current modeling scenarios, the expectation is that the implementation of land use and alternative transit strategies alone can result in at least 2 percent reduction in overall VMT and GHG emissions from base case levels in 2020. These benefits are expected to double in 2030. . . . ,

Requirements of SB 375

- RTP shall be an internally consistent document and shall include:
 - (1) A policy element
 - (2) *A Sustainable Communities Strategy--SCS*
 - (3) An Action Element, and
 - (4) A Financial Element
- Develop Alternative Planning Strategy (APS) if necessary
- Integration with RHNA
- SCS Implementation—Transit Priority Project

MPO Roles Under SB 375

- Develop and adopt RTP (SCS)/APS
- ***Shall*** adopt a public participation plan
- Subregion/CTC ***may*** develop the sub-regional SCS/APS
- MPO ***shall*** incorporate sub-regional SCS/APS
- MPO ***may*** adopt a framework for sub-regional SCS/APS to address intraregional land use, transportation, economic, air quality, and climate policy relationships
- MPO ***shall*** develop overall guidelines to ensure
 - Coordination,
 - Resolve conflicts,
 - Overall plan complies with applicable legal requirements,
 - Adopt the plan for the region

Minimum Planning Requirements

The MPO must obtain ARB acceptance that an ***Alternative Planning Strategy*** would, if implemented, achieve the GHG emission reduction targets established for the region by ARB

Process in Developing SCS/APS

1. Determine the regional GHG emission reduction target for 2020 & 2035
2. MPO shall adopt a public participation plan (ASAP)
3. Utilize the most recent planning assumptions, local general plans & other factors to develop the SCS/APS.
4. ARB review and approve SCS/APS

Process in Developing the SCS:

1. Determine regional GHG emission reduction target

- 1/31/2009 – ARB forms the Regional Targets Advisory Committee (RTAC)
- 9/30/2009 – RTAC transmits a report to ARB regarding factors/methodology to set the regional target
- Prior to setting the targets for a region, the ARB shall exchange technical information with the MPO and the affected ***air districts***
- MPO ***may*** recommend a regional GHG emission reduction target (***Implications***)
- 6/30/2010 – ARB issues ***draft*** regional GHG emission reduction target
- 9/30/2010 – ARB issues ***final*** regional GHG emission reduction target

Process in Developing the SCS

2. Adopt a Public Participation Plan

- Prior to starting the adopted public participation process, MPO shall submit a description to ARB the technical methodology it intends to use to estimate the GHG emissions from the SCS/APS.
- ARB shall respond to MPO in a timely manner, and MPO is encouraged to work with the ARB, until the findings from ARB that the methodology operates accurately

Process in Developing the SCS

2. Adopt a Public Participation Plan (Continued)

- MPO shall hold at least one public workshop after receipt of the report from the RTAC
- At least 16 public workshops throughout the region (1 in Imperial County, 3 in each of the rest 5 counties) for the development of the SCS/APS or on the draft SCS/APS
- At least 1 to 2 informational meetings (minimum 6 to 12 in total) in *each* county for elected officials or their representatives
- Minimum 55-day circulation for the draft SCS/APS, and a minimum of 3 public hearings on the draft SCS/APS

3. Components of SCS

Utilize the most recent planning assumptions, local general plans & other factors. The SCS shall:

- (i) identify general location of uses, residential densities & building intensities within the region;
- (ii) identify areas within the region sufficient to house all projected population growth;
- (iii) identify areas within the region sufficient to house an eight-year projection of regional housing need for the region;
- (iv) identify a transportation network to service the transportation needs of the region;

Components of SCS (Continued)

- (v) gather & consider the best practically available scientific information regarding resource areas & farmland in the region;
- (vi) consider the state housing goals;
- (vii) set forth a forecasted development pattern; when integrated with transportation network, & other transportation measures & policies, will reduce the GHG emissions; and
- (viii) allow the RTP to comply with Sec 176 of the CAA (42 U.S.C. Sec. 7506).

Modeling/Tool/Data/GIS Expectations of SB 375

- Specific languages in the SB 375
 - Implied
- Addendum to the 2007 Regional Transportation Plan Guidelines--Addressing Climate Change and Greenhouse Gas Emissions During the RTP Process (Adopted by the California Transportation Commission on May 29, 2008)

Modeling/Tool/Data/GIS

Expectations of SB 375

- Specific languages in the SB 375:
 - (g) Current planning models and analytical techniques used for making transportation infrastructure decisions and for air quality planning should be able to assess the effects of *policy choices*, such as:
 - Residential development patterns,
 - Expanded transit service,
 - Accessibility, the walkability of communities, and
 - Economic incentives and disincentives

Modeling/Tool/Data/GIS

Expectations of SB 375

- Specific languages in the SB 375 (Continued): The travel demand model guidelines shall account for:
 - The relationship between land use density and household vehicle ownership and vehicle miles traveled (4D)
 - The impact of enhanced transit service levels on household vehicle ownership and vehicle miles traveled (4D)
 - Changes in travel and land development likely to result from highway or passenger rail expansion (Land use model)
 - Mode splitting that allocates trips between automobile, transit, carpool, and bicycle and pedestrian trips.
 - Speed and frequency, days, and hours of operation of transit service.

Modeling/Tool/Data/GIS

Expectations of SB 375

- Specific languages in the SB 375 (Continued):
 - Each MPO shall adopt a public participation plan, for development of the SCS/APS that includes all of the following:
 - (iii) Workshops throughout the region to provide the public with the **information and tools** necessary to provide a clear understanding of the issues and **policy choices.** Each workshop, to the extent practicable, shall include **urban simulation computer modeling** to create visual representations of the SCS and APS.

Addendum to the 2007 Regional Transportation Plan Guidelines

- Develop tour-based travel models and activity-based travel models
- Build formal microeconomic land use models
- Commodity flows models should be developed, with truck and van tours.
- Full sample enumeration of households in the travel model and land use model should be studied and implemented in a few years, if feasible.

Addendum to the 2007 Regional Transportation Plan Guidelines

- The next household travel survey should include activities and tours.
- Geocoded employment data with occupational code should be purchased for two or more past years.
- Floor space quantity and rent data should be gathered.
- Freight data also should be collected.
- Households should be geocoded to location.
- Stated preference surveys of households and firms should be performed, as necessary, for use in location choice models.
- Microsimulation of households and firms should be investigated and developed, if feasible.

SCAG Plans/Strategies in Developing Model/Tool/GIS/DATA

- Collaborate with partners/pool resources
- Establish and follow best practice process
- Three parallel tracks:
 - Existing model enhancement
 - New model development (Short-term-3/2010 & Long-term)
 - Data needs for new model development
 - Household survey
 - Land use model: PECAS/UrbanSim/SCAG Model (CGE+UrbanSim)
 - Activity-based model
 - Data/GIS/tools for workshops
 - IPlace3 scenario building integrated with 4D & GHG emission
 - General Plan update
 - Existing land use
 - Spheres of influence
 - Resource area/farmland

RTP Policy Element

RTP policy element should be quantified with a set of indicators, include:

1. HVD & VMT per capita,
2. Roadway pavement & bridge conditions,
3. Work & non-work travel by 5 modes,
4. Measure of safety & security-injuries & fatalities for 5 modes,
5. Measure of equity & accessibility

RTP Action Element

- RTP action element describes the programs and actions necessary to implement the plan and assigns implementation responsibilities.
- The action element may describe all transportation projects proposed for development during the 20-year or greater life of the plan.
- The action element shall consider congestion management programming activities carried out within the region.

RTP Financial Element

- Summarizes the cost of plan implementation constrained by a realistic projection of available revenues.
- The financial element shall also contain recommendations for allocation of funds.
- A county transportation commission created pursuant to Section 130000 of the Public Utilities Code shall be responsible for recommending projects to be funded with regional improvement funds, if the project is consistent with the regional transportation plan.
- The first five years of the financial element shall be based on the five-year estimate of funds developed pursuant to Section 14524. The financial element may recommend the development of specified new sources of revenue, consistent with the policy element and action element.

RTP Financial Element (Continued)

- The financial element of transportation planning agencies with populations that exceed 200,000 persons may include a project cost breakdown for all projects proposed for development during the 20-year life of the plan that includes total expenditures and related percentages of total expenditures for all of the following:
 1. State highway expansion.
 2. State highway rehabilitation, maintenance, and operations.
 3. Local road and street expansion.
 4. Local road and street rehabilitation, maintenance, and operation.
 5. Mass transit, commuter rail, and intercity rail expansion.
 6. Mass transit, commuter rail, and intercity rail rehabilitation, maintenance, and operations.
 7. Pedestrian and bicycle facilities.
 8. Environmental enhancements and mitigation.
 9. Research and planning.
 10. Other categories.

RTP Financial Element (Continued)

- The MPO or CTC, whichever entity is appropriate, shall consider financial incentives for cities and counties that have resource areas or farmland, as defined in Section 65080.01, for the purposes of, for example, transportation investments for the preservation and safety of the city street or county road system and farm to market and interconnectivity transportation needs.
- The MPO or CTC, whichever entity is appropriate, shall also consider financial assistance for counties to address countywide service responsibilities in counties that contribute towards the greenhouse gas emission reduction targets by implementing policies for growth to occur within their cities.

Alternative Planning Strategy

- If the ARB determines that the SCS would not, if implemented, achieve the GHG emission reduction targets, the MPO **shall** revise the SCS or adopt an ***alternative planning strategy (APS)***, if not previously adopted, and submit the strategy for review
- The APS shall be a ***separate*** document from the RTP,
- May be adopted concurrently with RTP.

Alternative Planning Strategy

Preparing APS, MPO:

1. Shall identify the principal impediments to achieving the targets within the SCS.
2. May include an alternative develop pattern
3. Shall describe how the GHG emission reduction targets would be achieved, & why the development pattern, measures, and policies in the APS are the most practicable choices
4. An alternative develop.pattern set forth in the APS shall comply with Part 450 of Title 23 of, and Part 93 of Title 40 of, the CFR.
5. For purposes of the CEQA, an APS shall not constitute a land use plan, policy, or regulation, and the inconsistency of a project with an APS shall not be a consideration in determining whether a project may have an environmental effect.

Local Jurisdiction Land Use/General Plan as related to the SCS/APS

- Neither a SCS nor an APS regulates the use of land,
- Nothing in a SCS shall be interpreted as superseding the exercise of the land use authority of cities and counties within the region.
- Nothing in this section shall require a city's or county's land use policies and regulations, including its general plan, to be consistent with the regional transportation plan or an APS.
- Nothing in this section requires a MPO to approve a SCS that would be inconsistent with Part 450 of Title 23 of, or Part 93 of Title 40 of, the Code of Federal Regulations and any administrative guidance under those regulations.

Exemption of Consistency Requirements of Projects with SCS

- Nothing in this section requires projects programmed for funding on or before December 31, 2011, to be subject to the provisions of this paragraph if they
 - are contained in the 2007 or 2009 Federal Statewide Transportation Improvement Program,
 - are funded pursuant to Chapter 12.49 (commencing with Section 8879.20) of Division 1 of Title 2, or
 - were specifically listed in a ballot measure prior to December 31, 2008, approving a sales tax increase for transportation projects.
- Nothing in this section shall require a transportation sales tax authority to change the funding allocations approved by the voters for categories of transportation projects in a sales tax measure adopted prior to December 31, 2010.

Questions Discussions & Next Step